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cttgggcagg actgggcgtg gtgcagagta ggagcggtga tactgtggat tctgggcagg   160260
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aactgcctgc tctggcacat tcagaatgtc acagaactca cctggatgca ttcagcccct   160500
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caagtctctg aacagggctt accttagagt aaggcttaga agaggccgta aagtcagtct   161700
cagctccgtg gctctgcaga gctttgggac atgtgaattc ttaaaaacaa gactattgta   161760
cagttactat atgcatgcag tataaaatta taaccttgga aaatcctagc tagctgttga   161820
gctaattcca taaagtaatc agctcctgag ttctgcagtg gtaataataa tcagcataat   161880
gagtaaacac tgtgtgtgcc aggcagcgtc tcatttgatc cttgtgataa tcttgtaagt   161940
actgatttc tcccttcttt aaacaaagtt tttttttttt ttttagagag ggtctcacta   162000
tgttgcccag gctagtcttg aattc                                       162025
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<300>
<308> GenBank AJ242973
<309> 1999-10-26

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cctccaggcc cgccagcagc gccccgcgcc gcccgcccgc gcccctgccg cccccccggtt    120
ccggccgcgg accccactct ctgccgttcc ggctgcggct ccgctgccgg tagcgccgtc    180
ccccgggacc acccttcggc tggcgccctc cc atg ctc tcg gcc acc cgg agg    233
                                    Met Leu Ser Ala Thr Arg Arg
                                     1               5

gct tgc cag ctc ctc ctc ctc cac agc ctc ttt ccc gtc ccg agg atg    281
Ala Cys Gln Leu Leu Leu Leu His Ser Leu Phe Pro Val Pro Arg Met
```

```
                  10                      15                      20

ggc aac tcg gcc tcg aac atc gtc agc ccc cag gag gcc ttg ccg ggc       329
Gly Asn Ser Ala Ser Asn Ile Val Ser Pro Gln Glu Ala Leu Pro Gly
        25                      30                      35

cgg aag gaa cag acc cct gta gcg gcc aaa cat cat gtc aat ggc aac       377
Arg Lys Glu Gln Thr Pro Val Ala Ala Lys His His Val Asn Gly Asn
40                      45                      50                      55

aga aca gtc gaa cct ttc cca gag gga aca cag atg gct gta ttt gga       425
Arg Thr Val Glu Pro Phe Pro Glu Gly Thr Gln Met Ala Val Phe Gly
                    60                      65                      70

atg gga tgt ttc tgg gga gct gaa agg aaa ttc tgg gtc ttg aaa gga       473
Met Gly Cys Phe Trp Gly Ala Glu Arg Lys Phe Trp Val Leu Lys Gly
                75                      80                      85

gtg tat tca act caa gtt ggt ttt gca gga ggc tat act tca aat cct       521
Val Tyr Ser Thr Gln Val Gly Phe Ala Gly Gly Tyr Thr Ser Asn Pro
                90                      95                     100

act tat aaa gaa gtc tgc tca gaa aaa act ggc cat gca gaa gtc gtc       569
Thr Tyr Lys Glu Val Cys Ser Glu Lys Thr Gly His Ala Glu Val Val
        105                     110                     115

cga gtg gtg tac cag cca gaa cac atg agt ttt gag gaa ctg ctc aag       617
Arg Val Val Tyr Gln Pro Glu His Met Ser Phe Glu Glu Leu Leu Lys
120                     125                     130                     135

gtc ttc tgg gag aat cac gac ccg acc caa ggt atg cgc cag ggg aac       665
Val Phe Trp Glu Asn His Asp Pro Thr Gln Gly Met Arg Gln Gly Asn
                    140                     145                     150

gac cat ggc act cag tac cgc tcg gcc atc tac ccg acc tct gcc aag       713
Asp His Gly Thr Gln Tyr Arg Ser Ala Ile Tyr Pro Thr Ser Ala Lys
            155                     160                     165

caa atg gag gca gcc ctg agc tcc aaa gag aac tac caa aag gtt ctt       761
Gln Met Glu Ala Ala Leu Ser Ser Lys Glu Asn Tyr Gln Lys Val Leu
            170                     175                     180

tca gag cac ggc ttc ggc ccc atc act acc gac atc cgg gag gga cag       809
Ser Glu His Gly Phe Gly Pro Ile Thr Thr Asp Ile Arg Glu Gly Gln
        185                     190                     195

act ttc tac tat gcg gaa gac tac cac cag cag tac ctg agc aag aac       857
Thr Phe Tyr Tyr Ala Glu Asp Tyr His Gln Gln Tyr Leu Ser Lys Asn
200                     205                     210                     215

ccc aat ggc tac tgc ggc ctt ggg ggc acc ggc gtg tcc tgc cca gtg       905
Pro Asn Gly Tyr Cys Gly Leu Gly Gly Thr Gly Val Ser Cys Pro Val
                220                     225                     230

ggt att aaa aaa taa ttgctcccca catggtgggc ctttgaggtt ccagtaaaaa       960
Gly Ile Lys Lys  *
            235

tgctttcaac aaattgggca atgcttgtgt gattcacaat cgtggcattt aaagtgcaca      1020
aagtacaaag gaatttatac agattgggtt taccgaagta taatctatag gaggcgcgat      1080
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ggcaagttga taaaatgtga cttatctcct aataagttat ggtgggagtg gagctgtgcg   1140
gtttcctgtg tcttctgggg tctgagtgaa gatagcaggg atgctgtgtt cacccttctt   1200
ggtagaagct aaggtgtgag ctgggaggtt gctggacagg atggggggacc ccagaagtcc   1260
tttatctgtg ctctctgccc gccagtgcct tacaatttgc aaacgtgtat agcctcagtg   1320
actcattcgc tgaaatcctt cgctttacca                                     1350
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<210> 38
<211> 235
<212> PRT
<213> Homo Sapien

<400> 38

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Met Leu Ser Ala Thr Arg Arg Ala Cys Gln Leu Leu Leu Leu His Ser
1               5                   10                  15
Leu Phe Pro Val Pro Arg Met Gly Asn Ser Ala Ser Asn Ile Val Ser
            20                  25                  30
Pro Gln Glu Ala Leu Pro Gly Arg Lys Glu Gln Thr Pro Val Ala Ala
        35                  40                  45
Lys His His Val Asn Gly Asn Arg Thr Val Glu Pro Phe Pro Glu Gly
    50                  55                  60
Thr Gln Met Ala Val Phe Gly Met Gly Cys Phe Trp Gly Ala Glu Arg
65                  70                  75                  80
Lys Phe Trp Val Leu Lys Gly Val Tyr Ser Thr Gln Val Gly Phe Ala
                85                  90                  95
Gly Gly Tyr Thr Ser Asn Pro Thr Tyr Lys Glu Val Cys Ser Glu Lys
            100                 105                 110
Thr Gly His Ala Glu Val Val Arg Val Val Tyr Gln Pro Glu His Met
        115                 120                 125
Ser Phe Glu Glu Leu Leu Lys Val Phe Trp Glu Asn His Asp Pro Thr
    130                 135                 140
Gln Gly Met Arg Gln Gly Asn Asp His Gly Thr Gln Tyr Arg Ser Ala
145                 150                 155                 160
Ile Tyr Pro Thr Ser Ala Lys Gln Met Glu Ala Ala Leu Ser Ser Lys
                165                 170                 175
Glu Asn Tyr Gln Lys Val Leu Ser Glu His Gly Phe Gly Pro Ile Thr
            180                 185                 190
Thr Asp Ile Arg Glu Gly Gln Thr Phe Tyr Tyr Ala Glu Asp Tyr His
        195                 200                 205
Gln Gln Tyr Leu Ser Lys Asn Pro Asn Gly Tyr Cys Gly Leu Gly Gly
    210                 215                 220
Thr Gly Val Ser Cys Pro Val Gly Ile Lys Lys
225                 230                 235
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<210> 39
<211> 481
<212> DNA
<213> Homo Sapien

<300>
<308> GenBank AW195104
<309> 1999-11-29

<400> 39

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gagaaagtcc cttatgtatg tctagatttg gtaaagcgaa ggatttcagc gaatgagtca   180
ctgaggctat acacgtttgc aaattgtaag gcactggcgg gcagagagca cagataaagg   240
acttctgggg tcccccatcc tgtccagcaa cctcccagct cacaccttag cttctaccaa   300
gaagggtgaa cacagcatcc ctgctatctt cactcagacc ccagaaaacc cagggaaacc   360
cgacagctcc actcccacca taacttatta ggagataagt cacattttat caacttgcca   420
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tcgcgcctcc tatagattat acttcggtaa acccaatctg tataaattcc tttgtacttt    480
g                                                                    481
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<210> 40
<211> 390
<212> DNA
<213> Homo Sapien

<300>
<308> GenBank AW874187
<309> 2000-05-22

<400> 40
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gcattagaat tcatcaagcg gactcacatc ttttctctgc acagagaggg ctgaaaaggg    120
agagaaagcc ccttatgtat gtctagattt ggtaaagcga aggatttcag cgaatgagtc    180
actgaggcta tacacgtttg caaattgtaa ggcactggcg ggcagagagc acagataaag    240
gacttttggg ggtcccccat tcctgtccag caacctccca gctcacacct tagcttctac    300
caagaagggg tgaacacagc atccctgcta tcttcactca gaccccccaga agacacagga    360
aaccgcacag ctccactccc accataactt                                     390
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<210> 41
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 41
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agcggataac aatttcacac agggagctag cttggaagat tgc                       43
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<210> 42
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 42
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gtccaatata tgcaaacagt tg                                              22
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<210> 43
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 43
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agcggataac aatttcacac agg                                             23
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<210> 44
<211> 18
<212> DNA
<213> Artificial Sequence

<220>

110/122

<223> Oligonucleotide Primer

<400> 44
actgagcctg ctgcataa   18

<210> 45
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 45
tctcaatcat gtgcattgag g   21

<210> 46
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
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<400> 46
agcggataac aatttcacac agggatcaca cagccatcag cag   43

<210> 47
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<212> DNA
<213> oligonucleotide primer

<400> 47
agcggataac aatttcacac agg   23

<210> 48
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<212> DNA
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<400> 48
ctggcgccac gtggtcaa   18

<210> 49
<211> 20
<212> DNA
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<220>
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<400> 49
tttctctgca cagagagggc   20

<210> 50
<211> 44
<212> DNA
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<220>

<223> Oligonucleotide Primer

<400> 50
agcggataac aatttcacac agggctgaaa tccttcgctt tacc   44

<210> 51
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 51
agcggataac aatttcacac agg   23

<210> 52
<211> 18
<212> DNA
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<220>
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<400> 52
ctgaaaaggg agagaaag   18

<210> 53
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<220>
<223> Oligonucleotide Primer

<400> 53
tcccaaagtg ctggaattac   20

<210> 54
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<212> DNA
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<220>
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<400> 54
gtccaatata tgcaaacagt tg   22

<210> 55
<211> 20
<212> DNA
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<220>
<223> Oligonucleotide Primer

<400> 55
cccacagcag ttaatccttc   20

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<210> 56
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 56
gcgctcctgt cggtgcca                                            18

<210> 57
<211> 18
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 57
gcctgactgg tggggccc                                            18

<210> 58
<211> 15
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 58
catgcatgca cggtc                                               15

<210> 59
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 59
cagagagtac ccctcgaccg tgcatgcatg                               30

<210> 60
<211> 15
<212> DNA
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<220>
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<400> 60
catgcatgca cggtt                                               15

<210> 61
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<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 61
gtacgtacgt gccaactccc catgagagac                                    30

<210> 62
<211> 14
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 62
catgcatgca cggt                                                     14

<210> 63
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 63
gcctgactgg tggggccc                                                 18

<210> 64
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 64
gtgctgcagg tgtaaacttg taccag                                        26

<210> 65
<211> 28
<212> DNA
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<220>
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<400> 65
cacggatccg gtagcagcgg tagagttg                                      28

<210> 66
<211> 19
<212> DNA
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<220>
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<400> 66
actgggcatg tggagacag                                                19
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<211> 18
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<220>
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<400> 67
gcactttctt gccatgag                                              18

<210> 68
<211> 14
<212> DNA
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<220>
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<400> 68
tcagtcacga cgtt                                                  14

<210> 69
<211> 14
<212> DNA
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<220>
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<400> 69
cggataacaa tttc                                                  14

<210> 70
<211> 37
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<220>
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<400> 70
caatttcatc gctggatgca atctgggcta tgagatc                         37

<210> 71
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<220>
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<400> 71
caatttcaca cagcggatgc ttcttttggc tctgact                         37

<210> 72
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<400> 72
tcagtcacga cgttggatgc caataaaagt gactctcagc                40

<210> 73
<211> 37
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<400> 73
cggataacaa tttcggatgc actgggagca ttgaggc                   37

<210> 74
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<212> DNA
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<220>
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<400> 74
tcagtcacga cgttggatga gcagatccct ggacaggc                  38

<210> 75
<211> 38
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<220>
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<400> 75
cggataacaa tttcggatgg acaaaatacc tgtattcc                  38

<210> 76
<211> 36
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 76
tcagtcacga cgttggatgc agagcagctc cgagtc                    36

<210> 77
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
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<400> 77
cagcggtgat cattggatgc aggaagctct gg                        32
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<210> 78
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 78
tcagtcacga cgttggatgc ccacatgcca cccactac                          38

<210> 79
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 79
cggataacaa tttcggatgc ccgtcaggta ccacg                             35

<210> 80
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 80
tcagtcacga cgttggatgc ccacagtgga gcttcag                           37

<210> 81
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 81
gctcatacct tgcaggatga cg                                           22

<210> 82
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 82
tcagtcacga cgttggatga ccagctgttc gtgttc                            36

<210> 83
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<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 83
tacatggagt cgggggatgc acacggcgac tctc                    34

<210> 84
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
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<400> 84
tcagtcacga cgttggatgg ggaagagcag agatatacgt              40

<210> 85
<211> 29
<212> DNA
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<220>
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<400> 85
gaggggctga tccaggatgg gtgctccac                          29

<210> 86
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 86
tgaagcactt gaaggatgag ggtgtctgcg                         30

<210> 87
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 87
cggataacaa tttcggatgc tgcgtgatga tgaaatcg                38

<210> 88
<211> 26
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 88
gatgaagctc ccaggatgcc agaggc                             26
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<210> 89
<211> 27
<212> DNA
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<220>
<223> Oligonucleotide primer

<400> 89
gccgccggtg taggatgctg ctggtgc                                    27

<210> 90
<211> 31
<212> DNA
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<220>
<223> Oligonucleotide Template

<400> 90
cgcagggttt cctcgtcgca ctgggcatgt g                              31

<210> 91
<211> 43
<212> DNA
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<220>
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<400> 91
tgcttatccc tgtagctacc ctgtcttggc cttgcagatc caa                 43

<210> 92
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 92
agcggataac aatttcacac aggccatcac accgcggtac tg                  42

<210> 93
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 93
cccagtcacg acgttgtaaa acgtcttggc cttgcagatc caag                44

<210> 94
<211> 42
<212> DNA
<213> Artificial Sequence
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<220>
<223> Oligonucleotide primer

<400> 94
agcggataac aatttcacac aggccatcac accgcggtac tg              42

<210> 95
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 95
ctccagctgg gcaggagtgc                                       20

<210> 96
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 96
cacttcagtc gctccct                                          17

<210> 97
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Biotinylated primer

<400> 97
cccagtcacg acgttgtaaa acg                                   23

<210> 98
<211> 100
<212> DNA
<213> Homo sapien

<400> 98
cctttgagaa agggctctgc ttgagttgta gaaagaaccg ctgcaacaat ctgggctatg     60
agatcaataa agtcagagcc aaaagaagca gcaaaatgta                          100

<210> 99
<211> 100
<212> DNA
<213> Homo sapien

<400> 99
cctttgagaa agggctctgc ttgagttgta gaaagaaccg ctgcaacaat ctgggctatg     60
agatcagtaa agtcagagcc aaaagaagca gcaaaatgta                          100

<210> 100
<211> 100
<212> DNA
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<213> Homo sapien

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aatgctccca gtgctattca tgggcagctc tctgggctca                         100

<210> 101
<211> 100
<212> DNA
<213> Homo sapien

<400> 101
gaattatttt tgtgtttcta aaactatggt tcccaataaa agtgactctc agcaagcctc    60
aatgctccca gtgctattca tgggcagctc tctgggctca                         100

<210> 102
<211> 84
<212> DNA
<213> Homo sapien

<400> 102
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<212> DNA
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<212> DNA
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<210> 106
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<212> DNA
<213> Hom sapien

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<212> DNA
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<212> DNA
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<212> DNA
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<210> 112
<211> 100
<212> DNA
<213> Homo sapien

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<210> 113
<211> 100
<212> DNA
<213> Homo sapien

<400> 113

                                  122/122

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<211> 80
<212> DNA
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<210> 117
<211> 80
<212> DNA
<213> Homo sapien

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tcctacaccg gcggcccctg                                                   80


<210> 118
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Hair pin structure

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INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7   G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7   G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 99 05323 A (AFFYMETRIX INC) 4 February 1999 (1999-02-04) abstract; claims 1,4	1-100
X	WO 97 40462 A (SPECTRA BIOMEDICAL INC) 30 October 1997 (1997-10-30) page 4, line 2 - line 22 page 7, line 3 -page 8, line 4	1-100
X	WO 98 24935 A (AN GANG ;HARA MARK O (US); RALPH DAVID (US); VELTRI ROBERT (US); U) 11 June 1998 (1998-06-11) page 4, line 27 -page 5, line 6 page 6, line 14 - line 18	1-100

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X	Further documents are listed in the continuation of box C.		X	Patent family members are listed in annex.

° Special categories of cited documents :

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 September 2001	28/09/2001

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Filloy García, E

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INTERNATIONAL SEARCH REPORT

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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P,X	WO 00 51053 A (BRYANT STEPHEN PAUL ;GEMINI RESEARCH LTD (GB); KELLY PAUL JAMES (G) 31 August 2000 (2000-08-31) abstract; claims 1-24	1-100
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